

Appl. No. 10/604,495
Amd. Dated April 7, 2004
Preliminary Amendment

IN THE SPECIFICATION:

Please replace paragraph [0037] with the following new paragraph.

Paragraph [0037]: FIG. 1 shows an example of a downhole perforating tool usable in connection with the present invention, and FIG. 2 illustrates the flow sequence of a perforation operation. The tool 12 is suspended on a cable 13, inside steel casing 11. This steel casing sheathes the borehole 10 and is supported with cement 10b. The borehole 10 is typically filled with a completion fluid or water. The cable length substantially determines the depths to which the tool 12 can be lowered into the borehole. Depth gauges can determine displacement of the cable over a support mechanism (sheave wheel) and determines the particular depth of the logging tool 12. The cable length is controlled by a suitable known means at the surface such as a drum and ~~which~~ winch mechanism (not shown). Depth may also be determined by electrical, nuclear or other sensors which correlate depth to previous measurements made in the well or to the well casing. Also, electronic circuitry (not shown) at the surface represents control communications and processing circuitry for the logging tool 12. The circuitry may be of known type and does not need to have novel features. The block 800 in FIG. 2 represents bringing the tool 12 to a specific depth level.

Please replace paragraph [0043] with the following new paragraph.

Paragraph [0043]: Finally, a plug magazine 26 is also contained in the inner housing 14. After formation pressure has been measured and samples taken, the housing translation piston 16 shifts the inner housing 14 to move the plug magazine 26 into position over the drilled hole 806. A plug setting piston 25 then forces one plug from the magazine into the casing, thus resealing the drilled hole 807. The integrity of the plug seal may be tested by once again moving the inner housing so as to re-position the measurement-packer over the plug, then actuating this packer hole 808 and monitoring pressure through the flowline while a "drawdown" piston is actuated dropping and remaining constant at this reduced value. A plug leak will be indicated by a return of the pressure to the flowline pressure found after actuating the drawdown piston. It should be noted that this same testing method (809) can be used to verify the integrity of the tool-packer seal before drilling commences. However, for this test the measurement-packer is not set against

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the casing, thus allowing the drawdown to be supported by the tool-packer. The sequence of events is completed by releasing the tool anchors 810. The tool is then ready to repeat the sequence starting with block 800.

Please replace paragraph [0059] with the following new paragraph.

Paragraph [0059]: While the bit is shown in Figure 8 as being positioned in the formation, the drill bit may be positioned at various locations in the perforation to control the flow of fluid and/or to restrict the flow of debris into the borehole. As shown in Figure 8, the bit is positioned ~~between~~ beyond the casing and cement and into the formation.

Please replace paragraph [0061] with the following new paragraph.

Paragraph [0061]: As depicted by arrows, the drill bit 19a may optionally be advanced, withdrawn and/or rotated via flexible shaft 18 to dislodge debris and/or facilitate the flow of fluid through the perforation 182a. The advancement and/or retraction of the drill bit 19a by flexible shaft 18 may be repeated as necessary. The rotation of the drill bit 19a may also be repeated as necessary. This operation allows the perforation to be recreated as necessary to assure the flow of fluid through the perforation and into the downhole tool.